

IN THE CLAIMS:

1.-28. (Cancelled)

29. (Currently Amended) A recording medium having recorded thereon a video stream and a graphics stream, wherein:

the graphics stream and the video stream are multiplexed and integrated into a digital stream;

5 the graphics stream (i) constitutes a menu to be overlaid with a moving picture obtained by decoding the video stream and (ii) includes one or more interactive control segment and an object definition segment defining a graphics object;

the interactive control segment includes a plurality of pieces of multi-page information and time information;

10 the multi-page information defines a display composition of a multi-page menu; the time information includes a presentation time stamp, a selection timeout stamp, and a user timeout duration all of which are associated with a playback timeline of the video stream;

15 the presentation timestamp indicates a timing for displaying, as a current page, a first page of the menu;

the plurality of pieces of multi-page information includes include one or more pieces of button information;

the button information indicates information used to present the graphic object in a state of button material and to provide an interactive display composition on the page;

20 the button information includes a set-button-page command that instructs a playback apparatus to set, as a new current page, a page other than the current page when a state of a corresponding button material is changed to an activated state;

25 the selection timeout stamp indicates a timing for automatically activating a button material presented on the current page to cause the playback apparatus to execute the set-button-page command; and

the user timeout duration indicates a timing for resetting the current page to the first page so as to display the first page only.

the multi-page menu includes a no menu display state, a first page only display state and a multi-page display state; and

30 the time information includes information to transition the display state of the multi-page menu in accordance with reproduction proceeding of the video Stream.

30.-31. (Cancelled)

32. (Previously Presented) The recording medium-according to Claim 29, wherein:
 the interactive display does not disappear by user operation when a user interface model information indicates an Always-On; and

5 the interactive display is operable to disappear by user operation when a user interface model information indicates a Pop-Up.

33. (Currently Amended) A playback apparatus used for playing back a video stream and a graphics stream, comprising:

 a video decoder operable to decode the video stream to obtain a moving picture;
 and

5 a graphics decoder operable to decode the graphics stream ~~so as to overlay a first page and a second page on the moving picture~~, wherein;

the graphics stream and the video stream are multiplexed and integrated into a digital stream;

10 the graphics stream (i) constitutes a menu to be overlaid with the moving picture obtained by decoding the video stream and (ii) includes one or more interactive control segment segments and an object definition segment defining a graphics object;

15 the interactive control segment includes a plurality of pieces of multi-page information and time information;

the multi-page information defines a display composition of a multi-page menu;

15 the time information includes a presentation time stamp, a selection timeout stamp, and a user timeout duration all of which are associated with a playback timeline of the video stream;

the presentation timestamp indicates a timing for displaying, as a current page, a first page of the menu;

20 the plurality of pieces of multi-page information includes include one or more button information;

 the button information indicates information used to present the graphic object in a state of button material and to provide an interactive display composition on the page;

25 the button information includes a set-button-page command that instructs the playback apparatus to set, as a new current page, a page other than the current page when a state of corresponding button material is changed to an activated state;

the selection timeout stamp indicates a timing for automatically activating a button material presented on the current page to cause the playback apparatus to execute the set-button-page command; and

30 the user timeout duration indicates a timing for resetting the current page to the first page so as to display the first page only.

the multi-page menu includes a no-menu display state, a first page only display state and a multi-page display state;

35 the time information includes information to transition the display state of the multi-page menu in accordance with reproduction proceeding of, the graphic stream; and

the graphics decoder controls transitions of the, display state of the multi page menu, based on the time information.

34.-35. (Cancelled)

36. (Previously Presented) The playback apparatus according to Claim 33, wherein:

the interactive display does not disappear by user operation when a user interface model information indicates an Always-On; and

5 the interactive display is operable to disappear by user operation when a user interface model information indicates a Pop-Up.

37. (Currently Amended) A method for recording onto a recording medium, comprising: generating application data; and

 recording the application data onto the recording medium, wherein:

the application data includes a video stream and a graphics stream;

5 the video stream represents a moving picture made up of a plurality of pictures;

the graphics stream and the video stream are multiplexed and integrated into a digital stream;

the graphics stream (i) constitutes a menu to be overlaid with the moving picture obtained by decoding the video stream and (ii) includes one or more interactive control segment
10 segments and an object definition segment defining a graphics object;

the interactive control segment includes a plurality of pieces of multi-page information and time information;

the multi-page information defines a display composition of a multi-page menu;
the time information includes a presentation time stamp, a selection timeout
15 stamp, and a user timeout duration all of which are associated with a playback timeline of the video stream;

the presentation timestamp indicates a timing for displaying, as a current page, a first page of the menu;

20 the plurality of pieces of multi-page information includes include one or more pieces of button information;

the button information indicates information used to present the graphic object in a state of button material and to provide an interactive display composition on the page;

25 the button information includes a set-button-page command that instructs the playback apparatus to set, as a new current page, a page other than the current page when a state of a corresponding button material is changed to an activated state;

the selection timeout stamp indicates a timing for automatically activating a button material presented on the current page to cause the playback apparatus to execute the set-button-page command; and

the user timeout duration indicates a timing for resetting the current page to the
30 first page so as to display the first page only.

the display state of multi-page menu includes a no menu display state, a first page
only display state and a multi-page display state; and

the time information includes information to transition the display state of the
multi-page menu in accordance with reproduction proceeding of the video stream.

38. (Currently Amended) A method for playing back a video stream and graphics
stream, comprising:

decoding the video stream to obtain a moving picture; and

decoding the graphics stream ~~so as to overlay a first page and a second page on~~

5 the moving picture, wherein:

the graphics stream and the video stream are multiplexed and integrated into a
digital stream;

the graphics stream (i) constitutes a menu to be overlaid with the moving picture
obtained by decoding the video stream and (ii) includes one or more interactive control segment
10 segments and an object definition segment defining graphics object;

the interactive control segment includes a plurality of pieces of multi-page -
information and time information;

the multi-page information defines a display composition of a multi-page menu;

the time information includes a presentation time stamp, a selection timeout
15 stamp, and a user timeout duration all of which are associated with a playback timeline of the
video stream;

the presentation timestamp indicates a timing for displaying, as a current page, a first page of the menu;

20 the plurality of pieces of multi-page information includes include one or more button information; the button information indicates information used to present the graphic object in a state of button material and to provide an interactive display composition on the page;

the button information includes a set-button-page command that instructs the playback apparatus to set, as a new current page, a page other than the current page when a state of a corresponding button material is changed to an activated state;

25 the selection timeout stamp indicates a timing for automatically activating a button material presented on the current page to cause the playback apparatus to execute the set-button-page command; and

the user timeout duration indicates a timing for resetting the current page to the first page so as to display the first page only.

30 the display state of multi-page menu includes a no menu display state, a first page only display state and a multi-page display state; and

the time information includes information to transition the display state of the multi-page menu in accordance with reproduction proceeding of the video stream.